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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,426	02/11/2002	Cory Watkins	1552-CA-1	3969
37974	7590	11/23/2004	EXAMINER	
DICKE BILLIG & CZAJA, PLLC ATTN: JOHN VASUTA 100 SOUTH FIFTH STREET, SUITE 2250 MINNEAPOLIS, MN 55402			PHAM, HOA Q	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/073,426

Applicant(s)

WATKINS ET AL.

Examiner

Hoa Q. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/30/04 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 8-9, 16 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Kerstens et al (5,248,876) (of record).

Regarding claims 1, 8 and 16, Kerstens discloses a confocal imaging system comprises a light source (100) (column 4, lines 29-30 and column 11, lines 9-10 and lines 60-62), a non-laser confocal sensor (114,116), wherein the confocal imaging system is adapted to rapidly determining heights of projections on a substrate based upon light intensities identified during a plurality passes, wherein the confocal sensor is

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stationary relative to the light source during pass (see figures 1, 11, 14, 15 and column 8, lines 26-34; column 7, lines 49-54; column 7, lines 55-66).

Regarding claims 2, 9, 20 and 21; see column 8, lines 26-34 for a CCD camera.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-7, 10-15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerstens et al in view of McCarthy et al (4,802,748) (of record).

Regarding claims 3, 4, 10-11, 14, and 18; Kerstens et al discloses all the features of claim 5 except that the beam splitter is a pellicle beam splitter. However, such a feature is known in the art as taught by McCarthy et al. McCarthy et al, from the same field of endeavor, discloses a confocal scanning microscope in which the pellicle beam splitter is used (col. 3, lines 43-45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the beam splitter of Kerstens et al by a pellicle beam splitter as taught by McCarthy et al because the pellicle beam splitter is extremely thin so as not to double the image or introduce astigmatism as suggested by McCarthy (column 3, lines 43-45).

Regarding claims 5, 6, 7, 12-14, and 18; Kerstens et al does not explicitly teach the use of plural lenses in the object imaging system and the camera system; however,

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such use of plural lenses in each of imaging system is known to one skilled in the art for the purpose of providing means for focusing and/or varying the magnification. Thus, it would have been obvious to one skilled in the art at the time the invention was made to utilize the system provided by Kerstens et al in an inspection system having objective system and camera system with plural lenses for the purpose of providing means for adjusting the focus and/or magnification of the whole inspection system.

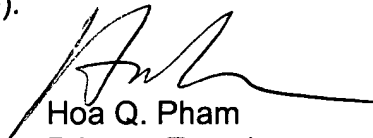
Regarding claims 15 and 19, see column 4, lines 29-30 and column 11, lines 60-62 of Kerstens et al for the use of different light sources.

6. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (571) 272-2426. The examiner can normally be reached on 7:30AM to 6 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoa Q. Pham  
Primary Examiner  
Art Unit 2877

HP  
November 18, 2004